

DISCOVER-IN

anatomy at your hands

UNIVERSIDAD DE
MURCIA



OrganKit

Secondary education

Nutrition and healthy habits

Acquire a better knowledge of the **body**
and its inner workings,
to be mindful of your **health**
and **lifestyle**.



OrganKit



A journey from real anatomy
to a healthy body

An innovative teaching proposal

STEAM learning about nutrition and healthy habits for secondary school students through the use of 100% real anatomical organs

1

The proposal has been co-designed and validated by University and Secondary School teachers, and adapted to the 3^{er} grade of the Secondary School syllabus.

2

Free-to-handle organs will pique the student's interest and allow them to experience, first-hand, the beauties of anatomy.

3

Digital tools and activities, gamified to more attractively teach about body physiology and healthy habits.

4

STEAM approach easily adapted to multiple subjects and grades. Allows for collaborative learning in small groups and promotes students' inclusion.

OrganKit Materials



Plastinated organs,
of digestive, circulatory,
respiratory and excretory
systems

Available organs:



Pig heart



Pig stomach



Lamb lung
Ovine bronchial tree



Pig kidneys



Endoscope, used to explore
inside the organs and simulate
clinical scenarios



QR code,
gives access
to digital content

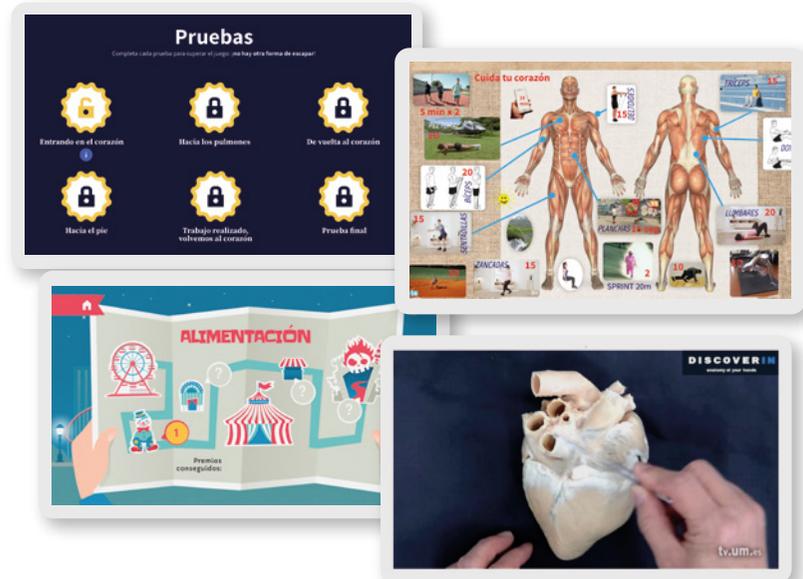


Anatomical map,
guides navigation
of plastinated organs

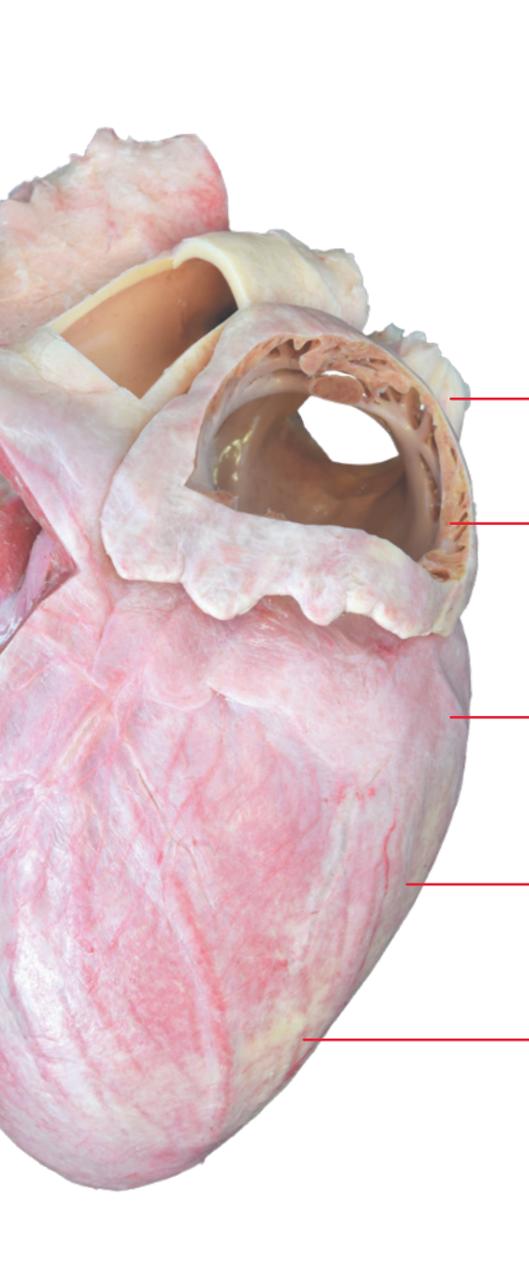
Teaching proposal adapted for Spanish curricular content of 3^{er} grade Secondary School students

CIRCULATORY TEACHER GUIDE DISCOVER-IN

- GET READY**
 - Short introductory videos, adaptation for flipped classroom, etc.
- PLASTINATED ORGAN**
 - Direct interaction with real anatomical material
- WHAT IS IT LIKE?**
 - Cooperative learning in small groups
 - Guide for basic concepts
 - Clinical commentary to provide additional context
 - Targeted questions aimed to develop key competences
- MOVEMENT**
 - Experience augmented reality
- HOW DOES IT WORK?**
 - Gamification methodology focused on dynamic and cooperative learning
- HOW TO CARE FOR IT**
 - Promote responsibility, reasoning and creativity
 - Interdisciplinary content
- EVALUATION**
 - Self-evaluation questionnaire: formative and sumative assessment, long-distance learnin



Interactive activities to study physiology and healthy habits: video-tutorials, challenges, gamified contents, self-evaluation tools...



Defining characteristics of the plastinated organs

Real

100% anatomically real and ready to handle.

Non-toxic

Biological material degrades over time, is messy and is usually preserved in toxic liquids. Plastinated organs can be used in any situation and environment, without gloves or other safety measures!

Easy

No more bending over backwards to procure and store biological material for study in Secondary Schools. They can be easily kept and transported in a briefcase!

Durability

Pieces do not degrade or break down, they are made of high resilient material. A long-term investment.

Variety

Wide selection of animal organs, adapted for syllabus content of Secondary School and Bacculaureate students.

How can Organkit be used?



Remote teaching



Traditional teaching
with unique materials



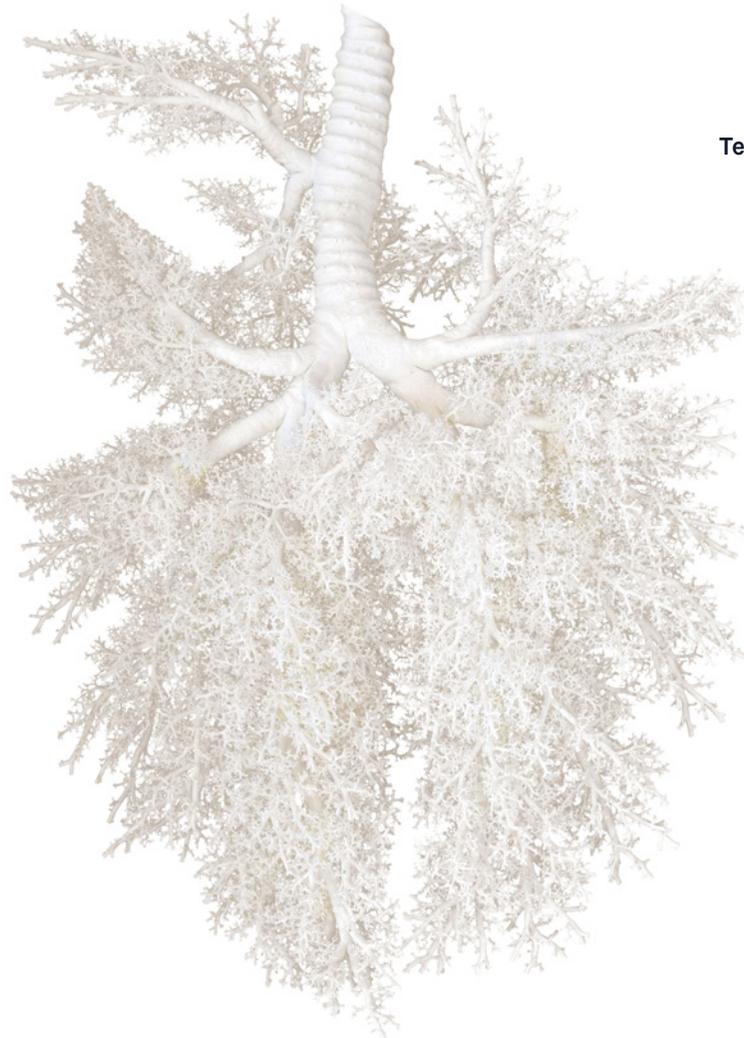
Project-based
learning



Reverse teaching,
gamification, etc.



Promote diversity and
learning with peers



Teaching students with disabilities
(class, home, hospital)



Models for drawings
and other art-forms



Base for augmented
reality markers



Inspire role-play
and creative writing



Cross-department
sharing



Teacher feedback

"There is nothing quite like having the student see, touch and manipulate a real organ. That moment where they pick it up and go: Ahhh!"

"These materials have helped my 3rd year students get past their disgust and squeamishness, since they can touch and manipulate real organs in class in a safe manner"

"I used this material with visually impaired students, and I was surprised at how meaningful it was for them, as well as how easy it was to provide immediate learning for them"

"Having plastinated organs as a resource for remote learning has opened the door to new ways of teaching"

"I have been able to implement augmented reality activities on these organs"

"For Valentine's Day, a group of students used plastinated hearts to make a video on the importance of love during teenage years"

DISCOVER-IN

International brand born at the University

DISCOVER-IN is a technology-based company (Spin-off) born after **30 years of experience** in the University of Murcia (Spain), and is an international leader in the investigation and application of plastination techniques.

In our **plastination laboratories**, anatomical materials are produced with the highest standards of manufacture (ISO9001-2015) and are ready to be used with innovative teaching tools. Our plastinated products are currently used in Universities, Museums, Veterinary Hospitals and Secondary Schools in worldwide countries.

DISCOVER-IN

anatomy at your hands



www.discover-in.com

Edificio Vitalis, Campus de Espinardo,
Universidad de Murcia, 30100 Murcia, España

info@discover-in.com • 868 88 46 97/94



f SéNeCa⁽⁺⁾

Agencia de Ciencia y Tecnología
Región de Murcia

Proyecto financiado por la CARM a través del Programa Regional de Apoyo a la Transferencia y Valorización del Conocimiento y el Emprendimiento Científico 2021 de la Fundación Séneca-Agencia de Ciencia y Tecnología de la Región de Murcia.